

**New Brighton Area High School  
New Brighton, Pennsylvania 15066**

**2018-2019  
CURRICULUM  
HANDBOOK**

**ADMINISTRATIVE PERSONNEL**

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High School Principal ..... Mr. Ryan L. Yates  
High School Assistant Principal ..... Mr. Robert A. Budacki, Jr.  
Director of Student Services ..... Mr. Gabriel M. Engel

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Counselor, Last Name A-L ..... Ms. Aimee Young  
Counselor, Last Name M-Z ..... Ms. Michelle Hubbard

*Questions concerning scheduling can be addressed by contacting the counselors at the High School between 7:15 a.m. and 3:00 p.m. daily.  
724-846-1050, ext. 305 (Ms. Young) or 306 (Ms. Hubbard)*

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# THE SCHEDULING PROCESS

## INTRODUCTION

The purpose of education is to prepare students for living in a complex world which is constantly being challenged by change. Careful planning of the total high school “program of study” is necessary to prepare students for life after graduation. Selection of courses should be based on the student’s proven abilities, interests, aptitudes and ambitions for the future. Establishing goals and working toward achieving them must be the focus of all students.

The goal of the Guidance Department is to ensure that all students have sufficient credits for graduation and are registered for the proper subjects each year. It is the responsibility of *each student*, however, to monitor the quality and quantity of his/her credits.

The scheduling process is the shared responsibility of students, parents, teachers and counselors. All of these individuals contribute ideas and information which result in effective educational programs for students. **Counselors** are available to assist students, parents, and teachers in developing a sound educational program. **Parents** assist students in the selection process by discussing alternatives and by helping them to analyze their individual interests and goals. **Teachers** are available to discuss the curriculum with students in an effort to provide understanding of the many options that are available. **Students** are encouraged to seek their teachers’ recommendations before enrolling in some courses so that they are appropriately placed and meet the prerequisites. Students must choose those subjects which give them the knowledge and skills that are necessary as determined by their current educational and career plans.

## PROCEDURAL REQUIREMENTS

1. Each student will participate in a group guidance scheduling orientation.
2. Each student must prepare a course selection sheet with required parental and teacher signatures.
3. Each student must register for at least seven (7) credits.
4. Each student must meet course prerequisites before enrolling in a class.
5. **Each registration for both required and elective subjects is a *commitment* to remain in that class for the entire term.**
6. Forms will be collected in homeroom and returned to guidance.
7. If necessary, the Guidance Counselors will meet with students to further counsel and to advise all course selections and requests.

## SCHEDULE CHANGES

Students are reminded that all course selections are final. **No course changes will be made after July 31<sup>st</sup> without administrative approval. Honors and AP Course selections are final and will not be changed at any time.** If the need arises for a schedule change due to failure in a class up to and including the mid-grade report sheet in September (4 1/2 weeks into the first nine week period), the following criteria will apply:

1. Documented evidence from the teacher that the student was putting forth effort in class and met with the teacher for extra help.
2. A meeting will be held with the parent and student, counselor, teacher, and principal.

\*NBHS reserves the right to make schedule changes based on need and individual circumstances.

**CLASS STATUS:** *Class status is determined by the number of credits “earned” by the student and not homeroom designation.*

## STUDENTS IN THE CLASS OF 2019, 2020, 2021, 2022

**Students in the Class of 2019 and beyond** must earn at least 27 credits during their high school career in order to meet graduation requirements. As Freshmen, students must earn at least 7 credits to be recognized as a Sophomore, at least 14 credits by the end of the Sophomore year to be recognized as a Junior, and at least 21 credits by the end of their Junior year to be recognized as a Senior.

Diploma .....	27 credits (this includes credit for the Graduation Project)
Senior .....	21 credits
Junior .....	14 credits
Sophomore .....	7 credits

# GRADUATION REQUIREMENTS

Students in the Class of 2019 and beyond must earn at least 27 credits during their high school years in order to meet graduation requirements (See credit requirements below).

## CLASS OF: 2019, 2020, 2021, 2022

English	4	Electives	6.5
*Math	4	Physical Education	1
Social Studies	4	*Computer/Business	1
*Science	4	*Practical & Fine Arts	1
Health	0.5		
Senior Project	1		
TOTALS	27		

\*The successful completion of two years of Algebra, Geometry, Biology, Computer/Business, and Practical & Fine Arts are required for graduation.

Practical & Fine Arts include courses in Art, Family Consumer Science, Technology Education, and Band/Chorus.

**Variations in the graduation requirements for BCCTC students are listed on Page 33-34.**

Keystone State Standardized Tests are Pennsylvania's required exams for graduation. By law, all students must score Proficient or Advanced on the Keystone State Standardized Tests in order to graduate. The Keystone Exams are given in the following subjects: Biology, Algebra 1 and English Literature (10<sup>th</sup> grade).

\*\*Students who do not score Proficient or Advanced will have access to subject-area remediation materials in order to prepare to retake a Keystone exam.



The NCAA logo in the course description is important for college-bound student-athletes who want to compete in NCAA sports. These courses are designated as NCAA Core Courses and can be used in the calculation of the NCAA Core Course GPA by the NCAA Eligibility Center. Students who think they may participate in college athletics should discuss the process with their counselor as soon as possible. There are specific academic requirements that must be fulfilled in order to be eligible to play sports for the NCAA. Please visit [www.ncaa.org](http://www.ncaa.org) to find the 'Guide for the College-Bound Student Athlete'.

## Grade Reporting

Grades are reported by:

1. Marking Period Average – Average of current grades earned during a 9 week period.
2. Cumulative Average – Average of all final grades from grades 9, 10, 11, and 12 (used to determine class rank).
3. Cumulative GPA – Cumulative average converted on a 4.0 scale (located on student transcript).

The calculation of a Weighted Course's Average is as follows:

- All final grades earned in an Honors course are multiplied by a weight of 1.1.  
Example: Honors Algebra I; grade earned is 95 percent. Weight is 1.1, Weighted percentage = 104.5 (95 x 1.1 = 104.5 percent).
- All final grades earned in an AP Course are multiplied by a weight of 1.2.  
Example: AP Biology; earned grade is 95 percent. Weight is 1.2, Weighted Percentage = 114 (95 x 1.2 = 114 percent).

Final grades of the Report Card will read the earned grade, but the Average will be calculated based on the weighted percentage.

Students will have the option to take electives in which they receive a grade but it is not calculated toward their Average. The Computer/Business, Practical & Fine Arts, and first six (6.5) electives taken will automatically count toward Average. However, if a student takes an elective in addition to those required above, he/she will be allowed to request that it not count toward the Average. This request must be made at the time of scheduling and must be indicated in writing, with a parent signature, and turned in with the student's selection sheet.

## GRADING SCALE

A	100% - 90%	B	89% - 80%
C	79% - 70%	D	69% - 65%
F	64% AND BELOW		

## INCOMPLETE GRADES

An incomplete grade for a nine-week period indicates that the work for that specific period has not been completed. For the first three grading periods, students have ten (10) school days from the end of the report period in which they must complete the make-up work. If a student has not completed the work in this period of time, the incomplete grade (I) will become a failing grade (F).

If a student receives an incomplete grade (I) during the final marking period and fails to complete the work required for the course by the last teacher day of the school year, he/she will not receive credit for the course.

Any student who fails a class must remediate that credit through summer school or by re-taking that course the following year in the classroom. Remediation on LOLA will only be permitted with administrative approval. Any remediated summer school or LOLA courses become a financial obligation to the student/family. Courses re-taken in the classroom will NOT be assessed a fee. In order to earn a diploma, all academic and financial obligations must be satisfied.

## NEW BRIGHTON AREA HIGH SCHOOL COURSE OFFERINGS

### ENGLISH

English and Composition 9  
Honors English and Composition 9  
English and Literature 10  
Honors English and Literature 10  
English 11  
Honors English 11  
English 12  
Honors English 12  
AP English/Lit  
Reading and Language Arts I, II, III, IV

### MATHEMATICS

Algebra I  
Honors Algebra I  
Algebra IA, Algebra IB  
Algebra II  
Honors Algebra II  
Geometry  
Honors Geometry  
Trigonometry/Pre-Calculus  
Honors Trigonometry/Pre-Calculus  
Calculus  
Honors Calculus  
AP Calculus  
Statistics  
Applied Math  
Basic Math I, II, III, IV

### SOCIAL STUDIES

World Cultures  
Honors World Cultures  
US History and Government I  
Honors US History and Government I  
US History and Government II  
Honors US History and Government II

### SOCIAL STUDIES (Cont.)

Economics/P.O.D  
Psychology/Sociology  
AP European History  
U.S. Law  
Honors U.S. Law

### SCIENCE

Science 9  
Biology  
Honors Biology & Lab  
Environmental Science  
Chemistry  
Honors Chemistry & Lab  
Physics  
Honors Physics & Lab  
AP Chemistry & Lab  
AP Biology & Lab  
Earth Science  
Astronomy & Meteorology  
Conceptual Chemistry  
Conceptual Physics  
Forensic Science  
Anatomy & Physiology  
Microbiology  
Allied Health Field Career  
STEM Engineering

### LANGUAGES

French I, II, III,  
Honors French IV  
Spanish I, II, III  
Honors Spanish IV  
Japanese I

**BUSINESS & INFORMATION MANAGEMENT**

Intro to Business  
Sports & Entertainment Marketing  
Yearbook - Full Year Course  
Personal Finance  
Accounting I  
Accounting II  
Personal Keyboarding  
Visual Basic  
Web Page Design  
Intro. C# Computer Language - Full Year Course  
Microsoft Office Applications I  
Microsoft Office Applications II  
Gaming

**HEALTH AND PHYSICAL EDUCATION**

Girls' Health  
Boys' Health  
Girls' Physical Ed.  
Boys' Physical Ed.  
Girls' Fitness Training  
Boys' Fitness Training

**\*TECHNOLOGY EDUCATION**

Introduction to Engineering  
Engineering: Research & Design I  
Engineering: Research & Design II  
Applied Technology Systems  
Manufacturing Systems I  
Manufacturing Systems II  
Manufacturing Enterprise  
Production Technology I  
Production Technology II  
Home Improvement Technologies  
Introduction to Auto Maintenance  
Computer Aided Design (CAD) I  
Computer Aided Design (CAD) II  
Computer Aided Design (CAD) III  
Video Production I  
Video Production II  
NBHS TV

**\*FAMILY & CONSUMER SCIENCES**

Foods and Nutrition I  
Foods and Nutrition II  
Culinary Cuisines  
Child Development I  
Child Development II

**\*ART**

Foundation Art I  
Foundation Art II  
Advanced Drawing  
Advanced Painting  
Introduction to Ceramics  
Ceramics II  
Ceramics III  
Honors Art – Full Year Course

**\*MUSIC**

Jazz Band  
Lionettes – 1<sup>st</sup> Semester Course  
Instrumental Music (Band)  
Honors Instrumental Music (Band)  
Percussion Ensemble  
Chorus  
Honors Chorus  
Music Theory  
Intro to Music Technology

**GENERAL ELECTIVES/SPECIALIZED PROGRAMS**

Career Skills  
Performance Forensics  
Honors Performance Forensics  
SAT Prep  
Dual Enrollment  
Lions On-Line Academy  
Work Release  
English as a Second Language  
Graduation Project  
CCBC Aviation Academy  
CCBC Health Academy  
CCBC STEM Academy

**BCCTC- Beaver County Career & Technology Center**

HVAC-R (Air Conditioning/ Refrigeration)  
Collision Repair Technology  
Auto Mechanics  
Business Information Systems  
Carpentry  
Commercial Art  
Logistics and Materials Management  
Cosmetology  
Electrical Occupations  
Culinary  
Graphic Arts/Printing  
Greenhouse/Landscaping  
Health Occupations  
Machine Tool Technology  
Masonry/Bricklaying  
Welding  
Vet Tech

**\* denotes subject area of courses that will fulfill Practical & Fine Arts credit**

# ENGLISH

## GPA requirements for students selecting the following subjects:

- For a student in a core English who plans to enroll in an Honors course, he/she must have a 90% average in core English.
- For a student in an Honors English who plans to continue in an Honors course, he/she must have a 82% average in Honors English.
- For a student in a core English who plans to enroll in AP English 12, he/she must have a 93% average in their core English.
- For a student in an Honors English 11 who plans to enroll in AP English 12, he/she must have an 85% average in their Honors English 11 course.
- A student may enroll in two (2) English classes simultaneously with teacher approval.

## State Testing Requirements that affect Graduation:

At the completion of **English Literature 10**, students will be required to take the Keystone Literature Exam.

### 3001 ENGLISH AND COMPOSITION 9

#### GRADE 9

*1 year—1 credit*

**PREREQUISITE:** *None*

This course will integrate the study of short stories, poems, dramas, and novels with composition. Compositions are specific in the narrative, persuasive, and informative styles of writing. Students will compose weekly response essays and will participate in peer evaluation. Literary classifications include: A research paper, class presentations and speeches, and a variety of individual projects with longer texts. This course will enable students to develop the foundation for writing and speaking in order to become independent communicators and critical thinkers.

### 3002 HONORS ENGLISH AND COMPOSITION 9

#### GRADE 9

*1 year—1 credit—1.1 weight*

**PREREQUISITE:** *See requirements at the beginning of the English section*

This course will stress a Humanities approach to literature through philosophy, as well as a genre-based exploration of the novel, drama, short story and poetry. Composition skills will center on journals, essays and reaction papers. Grammar instruction will be based on the correction of common errors in written and spoken English within the context of the course work. At least one oral presentation will be required of each student. Students are required to read one book during the summer and complete associated writing assignments. These assignments will be collected at the beginning of the school year and content in the first month of school will be based on those assignments. Failure to complete these requirements will result in a reduction of the first nine weeks grade. Students will not be permitted to drop this class due to failure to complete the summer reading assignments.

### 3003 ENGLISH AND LITERATURE 10

#### GRADE 10

*1 year—1 credit*

**PREREQUISITE:** *None*

English 10 challenges all students to increase their abilities in reading, comprehending, analyzing, interpreting and responding to various forms of literature. Students will read short stories, poetry, play scripts and non-fiction writing from their textbooks. Novels will be read independently and students will be tested through the Accelerated Reading program. Students will also read novels as part of the overall class curriculum. A majority of the writing assignments will focus on narrative, informative and persuasive essay writing skills. Speaking and listening skills will also be developed and assessed through discussions and presentations.

### 3004 HONORS ENGLISH AND LITERATURE 10

#### GRADE 10

*1 year—1 credit—1.1 weight*

**PREREQUISITE:** *See requirements at the beginning of the English section*

This course is designed for students who will be expected to demonstrate their understanding of American literature and world literature by reading, interpreting, analyzing, and evaluating short stories, poetry, novels, biographies, and essays. They will demonstrate this understanding through a variety of strategies including, but not limited to, compositions, oral presentations, individual projects, and activities within cooperative learning groups to illustrate that they are effective communicators, critical thinkers, creative producers, effective learners, and collaborative contributors. Students are required to read one book during the summer and complete associated writing assignments. Assignments will be collected at the beginning of the school year and work in the first month of school will be based on these assignments. Failure to do so will result in a reduction of the first nine weeks grade. Students will not be permitted to drop these classes due to failure to complete the summer reading assignments.

**3005 ENGLISH 11** 

**GRADE 11**

*1 year—1 credit*

**PREREQUISITE:** *None*

This course is designed for students who will be expected to demonstrate their understanding of literature by reading, interpreting, analyzing, and evaluating a variety of American Literature selections. These selections range from early American Literature to more recent contemporary pieces. The selections will include short stories, poems, novels, biographies, and essays. Students will demonstrate their understanding through tests, individual and group projects, and writing assignments that meet state requirements.

**3006 HONORS ENGLISH 11** 

**GRADE 11**

*1 year—1 credit—1.1 weight*

**PREREQUISITE:** *See requirements at the beginning of the English section*

This rigorous curriculum demands members of the class to demonstrate comprehension and synthesis of the content material in the various literary classifications through original responses, research papers real life issues, and compositions. The lecture method, cooperative learning, and individual study will be utilized to achieve these outcomes. Through these demonstrations, class members will show that they are effective learners, goal setters, and critical thinkers. Students are required to read two books during the summer and complete associated writing assignments. Assignments will be collected at the beginning of the school year and work in the first month of school will be based on these assignments. Failure to do so will result in a reduction of the first nine weeks grade. Students will not be permitted to drop these classes due to failure to complete the summer reading assignments.

**3007 ENGLISH 12** 

**GRADE 12**

*1 year—1 credit*

**PREREQUISITE:** *None*

This course contains literature and composition based on the study and interpretation of British short stories, essays, poetry and drama. Students will be involved in evaluating this literature through various writing samples, group projects and oral presentations. They will show that they are effective communicators and collaborative workers.

**3008 HONORS ENGLISH 12** 

**GRADE 12**

*1 year—1 credit—1.1 weight*

**PREREQUISITE:** *See requirements at the beginning of the English section*

Honors English 12 is a full-year course of composition, vocabulary enhancement, independent reading, and world literature study. Students will think critically and communicate effectively through their contributions in class discussions, individual and group projects, tests, and debates. In addition, students will research, organize, and compose a variety of written works and long-term projects. Students are required to read one book during the summer and complete associated writing assignments. These assignments will be collected at the beginning of the school year, and content in the first weeks of school will be based on these assignments. Failure to complete these requirements will result in a reduction of the first nine-week grade. Students will not be permitted to drop this class due to failure to complete the summer reading assignments.

**3009 AP ENGLISH 12** 

**ENGLISH LITERATURE AND COMPOSITION**

**GRADE 12**

*1 year—1 credit—1.2 weight*

**PREREQUISITE:** *See Requirements at the beginning of the ENGLISH section*

This thematically arranged curriculum is designed to encourage students to demonstrate their comprehension and synthesis through the writing of research papers, projects, and original literature compositions. Collaborative learning is emphasized along with the lecture method. Through these demonstrations, students will show that they are effective learners and communicators. Students are required to read two books during the summer and complete associated writing assignments. Assignments will be collected at the beginning of the school year and work in the first month of school will be based on these assignments. Failure to do so will result in the reduction of the first nine weeks grade. Students will not be permitted to drop the course due to failure to complete the summer assignments.

**Students enrolled in this class are encouraged to take the AP English Literature exam in May. The exam cost is the financial responsibility of the student.**

- 3030 READING / LANGUAGE ARTS I—English Elective
- 3031 READING / LANGUAGE ARTS II —English Elective
- 3032 READING / LANGUAGE ARTS III—English Elective
- 3033 READING / LANGUAGE ARTS IV –English Elective

**GRADES 9, 10, 11, 12**

*1 year—1 credit*

**PREREQUISITE:** *Teacher approval required.*

This leveled course reinforces the basic concepts of a variety of academic reading strategies, reading comprehension, language arts, composition and analyzing, interpreting and responding to various forms of literature. Students will work individually or in small groups to receive direct instruction on their own level.

## **MATHEMATICS**

*All students, as a requirement for graduation, must pass, two (2) years of Algebra and Geometry. A student may enroll in two (2) math courses simultaneously with teacher approval.*

### **GPA requirements for students selecting the following subjects:**

- For a student in a core Math who plans to enroll in an Honors course, he/she must have a 90% average in core Math.
- For a student in a core Math who plans to enroll in AP Calculus, he/she must have a 93% average in core Math.
- For a student in an Honors Math who plans to continue in an honors course, he/she must have a 82% average in Honors Math.
- For a student in an Honors Math who plans to enroll in AP Calculus, he/she must have an 85% average in Honors Math.

### **State Testing Requirements that affect Graduation:**

At the completion of **Algebra I** or **Algebra IB**, students will be required to take the Keystone Algebra Exam.

### **3101 ALGEBRA I**

**GRADES 9**

*1 year—1 credit*

**PREREQUISITE:** *None*

Algebra 1 provides a formal development of the algebraic skills and concepts necessary for students to succeed in advanced courses. In particular, this course provides for the use of algebraic skills in a wide range of problem-solving situations. The concept of function is emphasized throughout the course. Topics include: (1) operations with real numbers, (2) linear equations and inequalities, (3) relations and functions, (4) operations with polynomials, (5) data analysis.

### **3102 HONORS ALGEBRA I**

**GRADES 9**

*1 year—1 credit-1.1 weight*

**PREREQUISITE:** *A score of 85% or better on an Algebra I Readiness Test. Final approval will be determined by a group of teachers, counselors, and administrators.*

Honors Algebra I will cover the same material as Algebra I but at a more rapid pace and at a greater depth.

### **3103 ALGEBRA IA** **only counts for .5 credit for NCAA**

**GRADES 9**

*1 year—1 credit*

**PREREQUISITE:** *Teacher recommendation*

Algebra IA is a course that focuses primarily on linear relationships. This course provides for the use of algebraic skills in a wide range of problem-solving situations. This course will include an emphasis on the algebraic manipulation of linear expressions, equations and inequalities. Data collection and analysis will also be included. Completion of Algebra IA will prepare students for continuing in the mathematics curriculum to Algebra IB as well as for the Pennsylvania state assessments in mathematics.

- 3104 ALGEBRA IB**  **only counts for .5 credit for NCAA**  
**GRADE 10**  
*1 year—1 credit*  
**PREREQUISITE:** *Successful completion of Algebra IA*  
 Algebra IB is a full-year course that continues from Algebra IA. Topics include an in depth look at linear relationships, systems of linear equations and inequalities, the laws of exponents, and operations with polynomials.
- 3105 ALGEBRA II**   
**GRADES 10, 11, 12**  
*1 year—1 credit*  
**PREREQUISITE:** *Successful completion of previous math and teacher approval.*  
 Algebra II is a course that extends the content of Algebra I and provides further development of the concepts of a function. Topics include: relations, functions, equations, inequalities, polynomials and algebraic fractions. Students will use problem-solving techniques to solve problems and apply those techniques to real world situations.
- 3106 HONORS ALGEBRA II**   
**GRADES 9, 10, 11, 12**  
*1 year—1 credit—1.1 weight*  
**PREREQUISITE:** *See requirements at the beginning of the Math section and/or teacher approval.*  
 Honors Algebra II is a course designed for those students planning to attend a four-year university and major in a math/science field. Honors Algebra II will cover the same algebraic concepts as Algebra II but at a more rapid pace and at a greater depth. In addition, more emphasis will be placed on independent learning and discovery.
- 3107 GEOMETRY**   
**GRADES 10, 11**  
*1 year—1 credit*  
**PREREQUISITE:** *Successful completion of previous math and teacher approval.*  
 Geometry is a course involving the study of and the relationships that exist in various geometric shapes including lines, angles, triangles, polygons and circles. Emphasis will be placed on logical reasoning and problem solving. Algebra will be integrally used within the course to maintain the students' algebra skills.
- 3108 HONORS GEOMETRY**   
**GRADES 9, 10, 11**  
*1 year—1 credit—1.1 weight*  
**PREREQUISITE:** *See requirements at the beginning of the MATH section and/or teacher approval.*  
 Honors Geometry will cover the same geometric concepts as Geometry but at a more rapid pace and at a greater depth. In addition, more emphasis will be placed on independent learning and discovery. This course is essential for those students planning a math/science degree at a four-year college.
- 3109 TRIGONOMETRY/PRE-CALCULUS**   
**Grades 9, 10, 11, 12**  
*1 year—1 credit—1.0 weight*  
**PREREQUISITE:** *Successful completion of Algebra I, II, and Geometry and teacher approval.*  
 This is a course in which the trigonometric functions are developed from the wrapping function and the unit circle. There is an emphasis on functions and their behavior. Students will use problem-solving techniques to solve problems and apply those techniques to real world situations in both individual and group settings. Also, advanced topics from Algebra will be dealt with during the first semester.
- 3110 HONORS TRIGONOMETRY/PRE-CALCULUS**   
**GRADES 9, 10, 11, 12**  
*1 year—1 credit—1.1 weight*  
**PREREQUISITE:** *Successful completion of Algebra I, Algebra II and Geometry and teacher approval.*  
 This course will cover the same material as Trigonometry/Pre-Calculus but at a more rapid pace and at greater depth. In addition, this course will also cover Arithmetic/Geometric sums and a series, as well as limits and their properties.

- 3111 CALCULUS**   
**GRADES 10, 11, 12**  
*1 year—1 credit*  
**PREREQUISITE:** *Students must successfully complete Trigonometry/Pre-Calculus*  
 Topics include: limits, functions and graphs, derivatives, and applications of derivatives. Maxima-minima problems along with rates of change will also be explored. The use of graphing calculators will enhance the course enabling the student to analyze and interpret results. The students will be assessed using homework assignments and traditional exams.
- 3112 HONORS CALCULUS**   
**GRADES 10, 11, 12**  
*1 year—1 credit—1.1 weight*  
**PREREQUISITE:** *Students must have a GPA of at least 3.0 and successful completion of Trigonometry/Pre-Calculus*  
 The first semester explores some of the concepts of discrete mathematics. The second semester provides the student with an introduction to the study of calculus. Students will determine maximum and minimum points on a graph and interpret the results in problem situations. Students will analyze rational, radical and transcendental functions in both individual and group settings. Assessments will be made through oral and written evaluations.
- 3113 AP CALCULUS (Calculus AB)**   
**GRADES 11, 12**  
*1 year—1 credit—1.2 weight*  
**PREREQUISITE:** *See requirements at the beginning of the MATH section*  
 Advanced Placement Calculus is our most rigorous course offering and should be taken by any student anticipating a career in engineering (or related field). It is a fast-paced curriculum that deals in depth with applications of different calculus. These topics include, but are not limited to: Limits, differentiation, curve-sketching, transcendental functions, maxima-minima problems, and related rates. The integral calculus portion of the course deals with differential equations the definite integral, area between curves, volumes by revolving and slicing, volumes modeled by washers and cylinders, and the natural logarithm (differentiating and integrating). **Students enrolled in this class are encouraged to take the AP Calculus exam in May. The exam cost is the financial responsibility of the student.**
- 3114 STATISTICS**   
**GRADE 12 ONLY**  
*1 year—1 credit*  
**PREREQUISITE:** *Successful completion of Algebra II*  
 Statistics acquaints students with major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will frequently work on projects involving hands-on gathering and analysis of real world data. Computers and calculators will allow students to focus deeply on concepts involved in statistics. This course is recommended for students who anticipate research as part of their college studies and work experience. An introduction to probability will also be taught in this course.
- 3115 APPLIED MATH**  
**GRADE 12 ONLY**  
*1 year—1 credit*  
**PREREQUISITE:** *A student must have three math credits to be eligible to take applied math.*  
 This course emphasizes the applications of mathematical methods and concepts to a variety of real life situations. At the conclusion of the course, students will demonstrate their ability to calculate their wages, file tax returns, purchase a car, buy a house, along with other money management techniques. Students working independently and in groups will gather and interpret information from a variety of resource materials and then communicate their discoveries to their fellow students. Students will be assessed through the use of teacher observations, writing samples, completed applications, and testing.

- 3116 BASIC MATH I—Math Elective
- 3117 BASIC MATH II— Math Elective
- 3118 BASIC MATH III—Math Elective
- 3119 BASIC MATH IV—Math Elective

*GRADES 9, 10, 11, 12*

*1 year—1 credit*

**PREREQUISITE:** *Teacher Approval*

This course reinforces the basic concepts of mathematics and math reasoning. It deals with the numerical operations of adding, subtracting, multiplying and dividing whole numbers and fractions. It reviews math daily living skills covering such topics as: counting, measuring, money, checking accounts, home improvements, leisure activity spending, and traveling. Students will work individually or in small groups to receive direct instruction on their own level.

## ***SOCIAL STUDIES***

### **GPA requirements for students selecting the following subjects:**

- For a student in a core Social Studies who plans to enroll in an Honors course, he/she must have a 90% average in core Social Studies.
- For a student in a core Social Studies who plans to enroll in AP European History, he/she must have a 93% average in core Social Studies.
- For a student in an Honors Social Studies who plans to continue in an Honors course, he/she must have a 82% average in Honors Social Studies.
- For a student in an Honors World Cultures who plans to enroll in AP European History, he/she must have an 85% average in Honors World Cultures.

### **3201 US HISTORY AND GOVERNMENT I**

**GRADE 9**

*1 year—1 credit*

**PREREQUISITE:** *Successful completion of 8th grade Social Studies*

This course begins with Civil War Reconstruction and runs up to the eve of World War Two. The Constitution and American Government will be examined within the context of US History. The students will demonstrate a basic knowledge of US History of this era and the Constitution with special emphasis dealing the growth and changes of the US Constitution and Government of this period. Students will read, interpret, analyze, and synthesize historical documents and materials. Cause and effect relationships among historical events will be explored throughout the course as well as the impact of historical events on the world today. A variety of resources will be used in this course both print and non-print (electronic). Students will be routinely assessed through teacher observation, written tests and quizzes, group and individual projects, written exercises, multi-media projects, maps and drawings, political cartoons, comparisons, and debates.

### **3202 HONORS US HISTORY AND GOVERNMENT I**

**GRADE 9**

*1 year—1 credit—1.1 weight*

**PREREQUISITE:** *Successful completion of 8<sup>th</sup> Grade Social Studies*

*Teacher Recommendation from 8<sup>th</sup> Grade also needed.*

This course begins with Civil War Reconstruction and runs up to the eve of World War Two. The Constitution and American Government will be examined within the context of US History. The students will demonstrate a basic knowledge of US History of this era and the Constitution with special emphasis dealing the growth and changes of the US Constitution and Government of this period. Students will read, interpret, analyze, and synthesize historical documents and materials. Cause and effect relationships among historical events will be explored throughout the course as well as the impact of historical events on the world today. A variety of resources will be used in this course both print and non-print (electronic). Students will be routinely assessed through teacher observation, written tests and quizzes, group and individual projects, written exercises, multi-media projects, maps and drawings, political cartoons, comparisons, and debates.

**3203 US HISTORY AND GOVERNMENT II** **GRADE 10****1 year—1 credit****PREREQUISITE:** *None*

This course continues topics from the previous course picking up at World War Two and continuing to the modern day. The Constitution and American Government will be examined within the context of US History. The students will demonstrate a basic knowledge of US History of this era and the Constitution with special emphasis on the growth and changes of the US Constitution and Government of this period. Students will read, interpret, analyze, and synthesize historical documents and materials. Cause and effect relationships among historical events will be explored throughout the course as well as the impact of historical events on the world today. A variety of resources will be used in this course both print and non-print (electronic). Students will be routinely assessed through teacher observation, projects, written exercises, tests and quizzes, political cartoon, comparisons, and debates.

**3204 HONORS US HISTORY AND GOVERNMENT II** **GRADE 10****1 year—1 credit—1.1 weight****PREREQUISITE:** *See requirements at the beginning of the Social Studies Section*

This course continues topics from the previous course picking up at World War Two and continuing to the modern day. The Constitution and American Government will be examined within the context of US History. The students will demonstrate a basic knowledge of US History of this era and the Constitution with special emphasis on the growth and changes of the US Constitution and Government of this period. Students will read, interpret, analyze, and synthesize historical documents and materials. Cause and effect relationships among historical events will be explored throughout the course as well as the impact of historical events on the world today. A variety of resources will be used in this course both print and non-print (electronic). Students will be routinely assessed through teacher observation, projects, written exercises, tests and quizzes, political cartoon, comparisons, and debates. Students will be required to read the assigned book over the summer and complete the associated tasks. Assignments will be collected during the first week of school. Failure to complete those assignments will result in a reduction of the first nine weeks grade.

**3205 WORLD CULTURES** **GRADE 11****1 year—1 credit****PREREQUISITE:** *None*

The World Cultures course is designed to encourage students to develop learning, thinking, and communicative skills through the study of various cultures. Students will analyze and evaluate information and develop a respect for different belief/value systems. Students will also analyze the effects of geography on the development of a culture or civilization. Through the interpretation and evaluation of historic events, students will become aware of cause/effect relationships that influence their lives. The students will demonstrate learning competencies by sharing ideas with each other, contributing to group projects, preparing research papers that defend their conclusions, and teaching within small groups and in a class setting. Students will take on the role of problem finders and solvers by creating solutions.

**3206 HONORS WORLD CULTURES** **GRADE 11****1 year—1 credit—1.1 weight**

**PREREQUISITE:** *See requirements at the beginning of the Social Studies section.* The outcomes for this course are similar to those stated in World Cultures except that students will demonstrate a deeper understanding of problems and solutions through debate and active participation. Assessments will include oral and written assessments, teacher observation, and student conferencing. Students will be required to complete a summer assignment due the first week of school. Failure to complete will adversely affect first nine weeks grade.

**3207 U.S. LAW** 

**GRADE 12**

**1 year—1 credit**

**PREREQUISITE:** None

Introduction to Law is designed to engage high school students in a critical examination of their legal responsibilities and rights. The ultimate goal of the program is to provide high school students with a sense of belonging in society through empowerment with knowledge of the law. By providing students with a non-adversarial view of the law, Intro to Law works to impart an understanding of the fundamental principles of authority, fairness, justice and responsibility that underlie our legal system. The class will begin with an introduction into the legal system. From there we will examine the four main types of law: Criminal Law, Constitutional Law-Individual Rights, Consumer Law and Civil Law. We will also explore a variety of careers that are related to the field of law, such as: attorneys, police officers, corrections officers, judges and parole officers just to name a few. The class will consist of work from the book, role playing-mock trials, public speaking presentations, research based activities and a variety of other activities. We will attempt to have a wide range of local law and law enforcement experts come into the class as guest speakers. This class is designed to introduce students to their legal rights and responsibilities.

**3208 HONORS U.S. LAW** 

**GRADE 12**

**1 year—1 credit—1.1 weight**

**PREREQUISITE:** See requirements at the beginning of the Social Studies Section.

Honors U.S. Law is designed to engage high school students in a critical examination of their legal responsibilities and rights. Students will think critically and communicate effectively through their contributions in class discussions, individual and group projects, tests, and debates. In addition, students will research, organize, and compose a variety of written works and long-term projects. Students will demonstrate a deeper understanding of problems and solutions through debate and active participation. The ultimate goal of the course is to provide high school students with a sense of belonging in society through empowerment with knowledge of the law.

**3209 AP EUROPEAN HISTORY** 

**GRADE 12**

**1 year—1 credit—1.2 weight**

**PREREQUISITE:** See requirements at the beginning of the Social Studies section

This course begins with an examination of conditions that occurred prior to the 15th century including: The plague, the Great Schism, and the 100 Years War. The course will cover various topics in European History including the Renaissance, Reformation, Enlightenment, and Scientific Revolution, Elizabethan England, Napoleonic France, along with the development of national cultures, the evolution of philosophical, political, sociological, and ideological theories, religious changes, and changing governmental structures. This course requires major analysis of historical documents, ongoing outside reading and writing, and continued higher level in-class situations.

**Students enrolled in this class are encouraged to take the AP European History exam in May. The exam cost is the financial responsibility of the student.**

**3210 ECONOMICS/PRINCIPLES OF DEMOCRACY (P.O.D.)** 

**GRADE 11 & 12**

**1 semester—.5 credit**

**PREREQUISITE:** None

This course is designed to give students a general overview of Economics and the foundation of the American Government. **Economics** will provide the students with a basic understanding of the main concepts, theories, and decisions involved in Economics. Students will be introduced to how economists study the choices we make in order to meet our needs. Students will also learn how the concepts of Economics affect the decisions that individuals, businesses, and government make. Finally, the students will apply the concepts learned in the course and apply them to real world situations to gain a practical use of Economics. **American Government** will study the institutions of American government and how they work. Students will analyze the changing interpretations of the Constitution, the Bill of Rights and the current operations of the three branches of our government. Students will use primary source documents to analyze the relationship between the Federal, State, and Local governments. They will also explain the individual rights guaranteed by the Constitution, Bill of Rights, and other governmental documents and institutions.

## 3211 PSYCHOLOGY/SOCIOLOGY

### GRADE 11 & 12

*1 semester—.5 credit*

**PREREQUISITE:** *None*

This is an introductory survey course, designed to provide a challenging, rigorous, enlightening and rewarding experience and is designed to give students an introductory overview of each discipline. The students will spend nine weeks studying each social science. **Psychology** will explore the history, notable theorists, research methodology, ethics, subfields, classic experiments, memory, thinking, personality, states of consciousness, learning, and conditioning, motivation, emotion, and other topics. Psychology is a valuable area of study for all students having practical application in any career and within our daily lives. **Sociology** studies human society and social behavior. Positive human relationships are an essential part of a civilized society and how we interact with each other is important so that we can find answers to questions and solve problems in our world. Sociology teaches us to look at life in a scientific, systematic way. The way that we view the world comes from what we learn in our everyday activities. This course deals with the social atmosphere that helps to make us who we are and how we behave. Sociology will cover topics such as culture, violence, deviance, social control, socialization and personality, group behavior, social class, and social institutions.

## SCIENCE

- All students will need to successfully complete **either** Honors Biology/Lab **or** Biology to earn a NBHS diploma.

### Science course GPA Requirements for students selecting the following Science subjects:

- Students in a core Science who plan to enroll in an Honors Science course must have at least a 90% average.
- Students in a core Science who plan to enroll in an AP course must have at least a 93% average.
- Students in an Honors Science who plan to enroll in other Honors Science courses must have at least an 82% average.
- Students in an Honors Science who plan to enroll in an AP course must have at least an 85%.

### State Testing Requirements that affect Graduation:

At the completion of **Biology**, students will be required to take the Keystone Biology Exam.

## 3401 SCIENCE 9



### GRADE 9

*1 year – 1 credit*

**PREREQUISITE:** *None*

This is an introductory science course designed to prepare students for the rigors of other science courses in the high school as they transition. Topics covered in this course include: Nature & Process of Science, Characteristics of Life, Ecology, and Basic Biochemistry. Students will be required to turn in notes, pass assessments, create projects, and complete lab experiments including dissections and using microscopes.

## 3402 BIOLOGY



### GRADE 10

*1 year – 1 credit*

**PREREQUISITE:** *Science 9*

**Keystone Biology** topics that are covered in the course include:

- Describe relationships between structure and function at biological levels of organization.
- Identify and describe the cell structures involved in processing energy.
- Identify and describe how organisms obtain and transform energy for their life processes.
- Identify and describe the cell structures involved in transport of materials into, out of and throughout a cell.
- Explain mechanisms that permit organisms to maintain biological balance between their internal and external environments.
- Describe the three stages of the cell cycle.
- Explain how genetic information is inherited.
- Compare Mendelian and non-Mendelian patterns of inheritance.
- Explain the process of protein synthesis.
- Explain how genetic information is expressed.
- Apply scientific thinking, processes, tools and technologies in the study of genetics.
- Explain the mechanisms of evolution.
- Analyze the sources of evidence for biological evolution.

### 3403 HONORS BIOLOGY & LAB

#### GRADES 9 & 10

*1 year – 1 credit – 1.1 weight – 7 periods per week*

**PREREQUISITE:** *Teacher recommendation & have a 90% average in Science 9 or Integrated Science III.*

Students will participate in laboratory exercises, small group activities and classroom discussions.

**Keystone Biology** topics that are covered in the course include:

- Describe relationships between structure and function at biological levels of organization.
- Identify and describe the cell structures involved in processing energy.
- Identify and describe how organisms obtain and transform energy for their life processes.
- Identify and describe the cell structures involved in transport of materials throughout the cell.
- Explain the mechanisms that permit organisms to maintain biological balance between internal and external environments.
- Describe the stages of the cell cycle.
- Explain how genetic information is inherited.
- Compare Mendelian and non-Mendelian patterns of inheritance.
- Explain the process of protein synthesis.
- Explain how genetic information is expressed.
- Apply scientific thinking, processes, tools, and technologies in the study of genetics.
- Explain the mechanisms of evolution.
- Describe interactions and relationships in the ecosystem.

### 3404 AP BIOLOGY & LAB

#### GRADES 11 & 12

*1 year – 1 credit – 1.2 weight – 8 periods per week*

**PREREQUISITES:** *See requirements at the beginning of the Science section and teacher recommendation.*

Keystone Biology topics that are covered in the course include:

- Understand that cells are the fundamental unit of structure and function for life.
- Understand the molecular basis of heredity.
- Understand that the diversity of life is the result of evolution.
- Understand the structure and function of body systems and their interdependence.
- Understand the structure and function of plants.

**Students enrolled in this class are highly encouraged to take the AP Biology exam in May. The exam cost is the financial responsibility of the student.**

### 3405 CHEMISTRY

#### GRADES 10, 11, 12

*1 year – 1 credit – 1.0 weight*

**PREREQUISITES:** *Successful completion of Algebra I*

PA Core Chemistry topics that are covered in the course include:

- Describe observable physical properties of matter.
- Explain the composition of matter.
- Explain the relationship between physical properties and the structure of matter.
- Explain the formation of compounds using bonding theories.
- Explain the trends of the periodic table.
- Predict the behavior of gases using the gas laws.
- Describe factors that affect chemical reaction rates.

**3406 HONORS CHEMISTRY & LAB** **GRADE 10, 11, 12****1 year – 1 credit – 1.1 weight – 7 periods per week****PREREQUISITES:** See Science requirements and the completion of Biology and Algebra I

PA Core Chemistry topics that are covered in the course include:

- Describe observable physical properties of matter.
- Explain the composition of matter.
- Explain the relationship between physical properties and the structure of matter.
- Explain the formation of compounds using bonding theories.
- Explain the trends of the periodic table.
- Predict the behavior of gases using the gas laws.
- Describe factors that affect chemical reaction rates.

**3407 AP CHEMISTRY & LAB** **GRADES 11 & 12****1 year – 1 credit – 1.2 weight – 8 periods per week****PREREQUISITES:** See requirements at the beginning of the Science section and teacher recommendation and successful completion of Chemistry or Honors Chemistry.

AP Chemistry will focus on these six “Big Ideas.”

- The chemical elements are fundamental building materials of matter, and all matter can be understood in terms of arrangements of atoms. These atoms retain their identity in chemical reactions.
- Chemical and physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them.
- Changes in matter involve the rearrangement and/or reorganization of atoms and/or the transfer of electrons.
- Rates of chemical reactions are determined by details of the molecular collisions.
- The laws of thermodynamics describe the essential role of energy and explain and predict the direction of changes in matter.
- Any bond or intermolecular attraction that can be formed can be broken. These two processes are in a dynamic competition, sensitive to initial conditions and external perturbations.

**Students enrolled in this class are encouraged to take the AP Chemistry exam in May. The exam cost is the financial responsibility of the student.****3408 ANATOMY & PHYSIOLOGY** **GRADE 12****1 year – 1 credit – 1.0 weight****PREREQUISITE:** Seniors Only - Students are required to dissect and examine various specimens (i.e. pigs, hearts, chicken wings, ham hocks) during the course.

This rigorous course will provide a foundation for students moving into Allied Health areas of study in college, trade school, or other certification programs where knowledge of the human body is essential.

The following are the Common Core &amp; Keystone topics that are covered in the course:

- Identify the components of each human body system.
- Explain the form and function of body tissues and organs.
- Explain the nature of the human body as a whole unit, functioning with systems working together as one.
- Discuss diseases and disease prevention.
- Discover topics in microbiology that affect humans.

**3409 PHYSICS** **GRADES 11 & 12****1 year – 1 credit – 1.0 weight****PREREQUISITE:** Successful completion of Algebra I

PA Core Physics topics that are covered in the course include:

- Recognize basic energy types and source and describe how energy can be changed from one form to another.
- Identify and describe different types of force and motion, and the interaction between force and motion.

**3410 HONORS PHYSICS & LAB**   
**GRADES 11 & 12**  
*1 year – 1 credit – 1.1 weight – 7 periods per week*  
**PREREQUISITES:** See requirements at the beginning of the Science section and successful completion of Algebra I & Algebra II.  
**PA Core Physics** topics covered in the course include:

- Recognize basic energy types and sources.
- Describe how energy is conserved, but can be changed from one form to another.
- Identify and describe different types of force and motion, and the interaction between force and motion.

**3411 ENVIRONMENTAL SCIENCE**   
**GRADES 10, 11, 12**  
*1 semester – .5 credit*  
**PREREQUISITE:** Successful completion of Biology or Honors Biology  
This course will involve investigation, research, and discussion of subjects from the discipline of Environmental Science. Topics covered include land use & planning, pollution, degradation, habitat loss, biodiversity, climate change, and resource depletion. We will focus on how humans are affecting their habitats in both positive and negative ways, yet differently around the world as they struggle to find adequate food, water and shelter in order to survive and maintain employment to provide for their everyday needs.

**3412 EARTH SCIENCE**   
**GRADES 10,11,12**  
*1 semester – .5 credit*  
**PREREQUISITE:** Successful completion of Science 9  
Welcome to Earth Science – the study of the world under your feet!  
This course will use hands-on experimentation, activities, completion of projects, and direct instruction. You will be invested in learning the ‘how’ and ‘why’, not just the ‘what’ of science. Throughout the course, you will gain an appreciation of how Earth Science is relevant in your everyday life. Topics include these 2 main branches of Earth Science:

- Geology (study of rocks, earthquakes, volcanoes and plate tectonics)
- Oceanography (study of the oceans and water systems)

**3413 CONCEPTUAL PHYSICS**   
**GRADES 10, 11, 12**  
*1 semester – .5 credit*  
**PREREQUISITE:** Successful completion of Biology or Honors Biology. Students who have taken Physics or Honors Physics are not eligible to take this course.  
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. Laboratory experiments and computer-based exercises will enhance the understanding of basic physical principles and applications.

**3414 CONCEPTUAL CHEMISTRY**   
**GRADES 10, 11, 12**  
*1 semester – .5 credit*  
**PREREQUISITE:** Successful completion of Biology or Honors Biology. Students who have taken Chemistry or Honors Chemistry are not eligible to take this course.  
This course provides a conceptually-based exposure to the fundamental principles and processes of the chemical world. Topics include atomic structure, bonding, periodic table, physical and chemical properties. Upon completion, students should be able to describe examples and applications of the principles studied. Laboratory experiments and computer-based exercises will enhance the understanding of basic physical principles and applications.

**3415 STEM ENGINEERING** 

**GRADES 11 & 12**

**1 semester – .5 credit**

**PREREQUISITE:** *None*

The major focus of this science-based course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts of engineering. Students will learn about the following engineering disciplines: Civil, Electrical, Chemical, Mechanical, and Industrial. Students will learn about project management and will also employ engineering and scientific concepts to solve design problems.

**3416 FORENSIC SCIENCE** 

**GRADES 11 & 12**

**1 semester – .5 credit**

**PREREQUISITE:** *Successful completion of Chemistry OR Physical Science*

This course presents scientific concepts, processes, and thinking that allow students to draw necessary conclusions about evidence and other findings. Students must be able to complete laboratory experiments, make calculations, and create written reports. The following topics will be covered in this class: data analysis, types of evidence, hair analysis, fingerprints, blood, DNA, drugs, handwriting analysis, forgery, bone analysis, and time of death calculations.

**3417 ASTRONOMY & METEOROLOGY** 

**GRADES 10, 11, 12**

**1 semester— .5 credit**

**PREREQUISITE:** *Successful completion of Science 9*

This course will be a general study of the atmosphere and cosmos around you using hands-on experimentation, activities, completion of projects, and direct instruction.

We will use the NBHS Planetarium for star gazing and studying the motions of the Earth and visible planets of our solar system. Weather and climate will also be observed, researched and discussed on local, regional, national and global levels. Topics will come from these 2 main branches of Earth Science:

- Astronomy (study of our universe; not just the stars, but comets, planets, & galaxies)
- Meteorology (study of the atmosphere, weather, climate)

**3418 MICROBIOLOGY** 

**GRADES 11 & 12**

**1 semester— .5 credit**

**PREREQUISITE:** *Successful completion of Biology and Chemistry*

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include and overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance and immunity. Upon completion of this course, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques

## ***LANGUAGE—Electives***

**6301 FRENCH I**

**GRADES 9, 10, 11, 12**

**1 year—1 credit**

**PREREQUISITE:** *None*

Students in French I will compare cultures, discriminate and repeat sounds in French pronunciation, read and interpret, write imitatively, analyze both spoken and written phrases, and communicate effectively at a novice level. Using strategies like collaborative learning, students will role play, present dialogues, view videotapes, listen to audiotapes, and write short compositions. They will demonstrate competencies by participating in small group conversation, critique of written material, and response to verbal communication by the teacher and native speakers on audio tapes.

**6302 FRENCH II****GRADES 9, 10, 11, 12****1 year—1 credit****PREREQUISITE:** *French I and teacher approval*

Students will continue to utilize strategies and demonstrate the outcomes described in French I at an intermediate mastery level. Students will be expected to think critically in the target language and analyze and interpret more proficiently in both written and spoken French. Students will demonstrate competency by participation in guided conversation, critique of written material and response to explanations and directions in the target language.

**6303 FRENCH III****GRADES 10, 11, 12****1 year—1 credit****PREREQUISITE:** *French II and teacher approval*

French III students further develop the listening, speaking, reading and writing skills acquired from French I and 2. Through the study of more complex grammatical structures, students will communicate more effectively in the target language. Role-play, simulation of real life experiences, and discussion of readings and videos further enhance fluency in the language. Students explore the geography, history, and culture of francophone countries in the target language. Students further connect the language with other disciplines, and compare French language and culture with our own.

**6304 HONORS FRENCH IV****GRADES 11, 12****1 year—1 credit-1.1 weight****PREREQUISITE:** *French III and permission from French Teacher*

Honors French IV refines the listening, speaking, reading, and writing skills developed in the three years of prior study. Progressively more French is used in the class. Study of more complex grammatical structures furthers the ability of the students to communicate at a high performance level. Students explore the history, art, literature, and contemporary issues of francophone countries in the target language. The French teacher acts as facilitator in this class.

**6305 SPANISH I****GRADES 9, 10, 11, 12****1 year—1 credit****PREREQUISITE:** *None*

Spanish I students will read, interpret, analyze, and write Spanish phrases and communicate with each other on an introductory level, focusing on the fundamentals of pronunciation, grammar, and reading. The students will learn these skills by the use of cooperative learning, writing samples, teacher observation, and dialogue practice. The students will demonstrate competency by engaging in group conversation and through individual responses.

**6306 SPANISH II****GRADES 9, 10, 11, 12****1 year—1 credit****PREREQUISITE:** *Spanish I and teacher approval*

This course is designed to provide the students with a general grammatical review of Spanish I and an introduction of some of the finer points of Spanish grammar. In Spanish II, students will effectively communicate in simple face-to-face conversations and interpret, analyze, and respond to common questions. The students will acquire the skills necessary for this through videotape, interviews, role play and real life simulations.

**6307 SPANISH III****GRADES 10, 11, 12****1 year—1 credit****PREREQUISITE:** *Spanish II and teacher approval*

This course is designed primarily to develop fluency while continuing to strengthen the students' understanding of Spanish grammar with literary selections. In Spanish III, students can narrate information in formal and informal settings. The students will acquire the skills necessary to perform the competencies required through teacher-student conversations, role play, simulations, narrations, and group projects. The students strive to attain proficiency which can be understood without difficulty by speakers unaccustomed to non-native speakers.

**6308 HONORS SPANISH IV**

**GRADES 11, 12**

*1 year—1 credit—1.1 weight*

**PREREQUISITE:** *Completion of Spanish III and teacher approval*

Honors Spanish IV begins with a complete grammar review followed by a continuation of literary study at a higher level. Classes will be conducted in Spanish, encouraging free conversation. The objective at this level is to approach conversational fluency. The emphasis here is still placed on standard usage with some study of classical Spanish through reading assignments. Cultural study continues, contrasting the differences among Spanish-speaking peoples through numerous short reading selections.

**6309 JAPANESE I**

**GRADES 9, 10, 11, 12**

*1 year—1 Credit*

**PREREQUISITE:** *None*

Japanese I students will communicate in Japanese, gain knowledge and understanding of Japanese culture, connect with other disciplines, make comparisons into the nature of language and culture, and investigate multilingual communities. Using a communicative teaching approach, students will express themselves in Japanese at the Novice level on topics such as self, school, interests and activities, family, and day to day living skills. Students will be introduced to the *hiragana* writing script, and basic *kanji*.

## ***BUSINESS & INFORMATION MANAGEMENT***

*All students, as a requirement for graduation, have to pass one (1) credit within Computer/Business course offerings.*

### **BUSINESS COURSE OFFERINGS**

**6501 INTRODUCTION TO BUSINESS & MARKETING**

*Grades 9, 10, 11, 12*

*1 semester—.5 credit*

**PREREQUISITE:** *None*

Introduction to Business and Marketing allows the students to discover how the American Free Enterprise System operates and helps prepare students to make decisions as consumers, workers, and citizens. We will study and practice professional business communication and etiquette. The course is also a study of the fundamentals in marketing, advertising, and merchandising activities. The marketing mix is explored and these principles are applied to projects where students participate in team building, decision making activities.

**6502 SPORTS & ENTERTAINMENT MARKETING**

*Grades 9, 10, 11, 12*

*1 semester—.5 credit*

**PREREQUISITE:** *Intro to Business & Marketing, Teacher Recommendation*

Sports and Entertainment Marketing is a unique and innovative course designed for students with an interest in the sports and entertainment industry. This course stresses the utilization of fundamental marketing concepts and will include an orientation to the sports and entertainment industry. Marketing strategies along with topics in sponsorship, pricing, marketing research, endorsements and promotions will be part of this course.

The course will develop critical thinking, decision making and communication skills through real-world applications. Students will be prepared to handle specific tasks associated with either industry. This course offers students an edge if pursuing marketing or sports management degrees on the collegiate level.

**6503 YEARBOOK**

**GRADES 10, 11, 12**

*1 year—1 credit*

**PREREQUISITE:** *Advisor's preapproval*

This course will introduce students to all of the various elements of publishing a high school yearbook. Students will develop skills in layout design; writing copy, headlines, and captions; photography; Photoshop, marketing, and finances. We're looking for students who are creative, original, outgoing, hardworking, and willing to dedicate extra time to complete quality work on a strict time schedule. Your ultimate class project is the high school yearbook, the *Alaurum*. If you're interested, please see Mrs. Runatz for an application prior to scheduling.

**6504 PERSONAL FINANCE****GRADES: 11, 12****1 semester—.5 credit****PREREQUISITE: None**

Students will learn to establish good financial management habits for managing their own personal financial affairs. The class will study investing in one's own human capital, developing a banking relationship, understanding credit and debt, creating a budget, insurance, investment, identity theft and fraud. These skills will help students build financial success later in life by developing good financial management habits.

**6505 ACCOUNTING I****GRADES 10, 11, 12****1 semester—.5 credit****PREREQUISITE: None**

Students will develop an understanding of accounting and bookkeeping procedures by providing experiences in business transactions, debits and credits, and the use of business papers, journals, and ledgers in practical and realistic activities. Students will complete the accounting cycle for a sole proprietorship.

**6506 ACCOUNTING II****GRADES 10, 11, 12****1 semester—.5 credit****PREREQUISITE: Accounting I**

Students will build upon their knowledge from Accounting I by studying accounting procedures for a business organized by a corporation. Students will be introduced to special journals, payroll, and taxes.

**COMPUTER COURSE OFFERINGS****6507 PERSONAL KEYBOARDING****GRADES 9, 10, 11, 12****1 semester—.5 credit****PREREQUISITE: None**

Students will learn the valuable skill of touch keyboarding. They will develop speed and accuracy to become efficient and productive at entering data into the computer. Students will learn the alpha, numeric, and symbol keys. They will also develop language, proofreading, and editing skills. This class teaches a valuable skill no matter the career goal in mind!

**6508 VISUAL BASIC****GRADES 9, 10, 11, 12****1 semester—.5 credit****PREREQUISITE: Algebra I**

This one-semester course is hands-on and designed to provide essential skills and experience with the development of computer programs. This course is an introductory programming course for beginners. Students in this course will explore and design business and personal application programs on a variety of topics using the Visual Basic software. Problem solving, object oriented programming, and algorithm development skills will be used as students design, write code, and debug programs. Students planning on pursuing a career in business, information technology, or computers should consider taking this course. It is also for those who are simply curious and interested about learning programming. No computer programming experience is necessary, however, it assumes students are familiar with basic Windows skills and file management.

**6509 WEB PAGE DESIGN****GRADES 9, 10, 11, 12****1 semester—.5 credit****PREREQUISITE: None**

This course is designed to give you an "edge" in whatever career you choose to pursue. This course will introduce you to the process of planning, creating, and maintaining eye pleasing and content rich websites for both professional and personal use. The skills of acquiring, processing, and communicating information to others are very important skills for students to learn in today's Information Age. This course will provide the student with the principles of basic web design using HTML/XHTML, but Adobe's Dreamweaver will be the central program utilized in this class as students go from creating basic one page sites to elaborate multi-page sites with all the bells and whistles. No experience is necessary.

**6510 INTRODUCTION TO C# COMPUTER LANGUAGE**

**GRADE 9, 10, 11, 12**

***1 year —1credit***

***PREREQUISITE:*** *Students must successfully complete Algebra I or Algebra IA and IB and Visual Basic*

Microsoft C# computer language combines the best features of Visual Basic, C++ and Java. This entry level course will challenge the student with real life programming applications. Students will gain knowledge of computer programming through the use of a GUI (Graphic User Interface). This interface will also allow the user to produce professional looking applications. The student will be assessed using programming assignments and a final application.

**6511 MICROSOFT OFFICE APPLICATIONS I**

**GRADES 9, 10, 11, 12**

***1 semester—.5 credit***

***PREREQUISITE:*** *None*

This is a hands-on course in which students will use Microsoft Office and the Windows operating environment. Students will acquire software skills that will prepare them for college and the workplace. The course will include three components of the Microsoft suite: Word, PowerPoint and Publisher. Coursework includes MLA format, letter format and other business documents; concepts covered: margins, line spacing, font type, style and size, alignment, references and sources, cut & paste, drag & drop, bullets and numbering. In PowerPoint students will create a slideshow using text, graphics, animation and design. Students will also learn to create flyers, brochures and newsletters.

**6512 MICROSOFT OFFICE APPLICATIONS II**

**GRADES 9, 10, 11, 12**

***1 semester—.5 credit***

***PREREQUISITE:*** *Microsoft Office Applications I*

This is a hands-on course in which students will use Microsoft Office and the Windows operating environment. Students will acquire software skills that will prepare them for college and the workplace. This course will include three components of the Microsoft Suite: Word, Excel and Access. The coursework will include resumes, form letters, and labels using Word. In Excel, students will learn to enter and format data, use formulas and functions, and chart data. Students will study creating tables, forms, queries and reports in Access.

**6513 GAMING**

**Grades 9, 10, 11, 12**

***1 semester—.5 credit***

***PREREQUISITE:*** *None*

Gaming is an introductory programming course that will develop a student's coding skills first through drag and drop programming and then advance to writing code. Students will also develop skills in graphic design, animation, testing and debugging.

***HEALTH AND PHYSICAL EDUCATION***

**6610 BOYS' HEALTH**

**GRADES 9, 10, 11, 12**

***1 semester—.5 credit***

***PREREQUISITE:*** *None*

The students will be provided with knowledge pertaining to the five components of health. This information will help them to make appropriate decisions regarding their mental and physical development throughout life. Their knowledge will be demonstrated through exams, quizzes, papers, critiques, and posters.

**6611 GIRLS' HEALTH**

**GRADES 9, 10, 11, 12**

***1 semester—.5 credit***

***PREREQUISITE:*** *None*

The students will be provided with knowledge pertaining to the five components of health. This information will help them to make appropriate decisions regarding their mental and physical development throughout life. Their knowledge will be demonstrated through exams, quizzes, papers, critiques, and posters.

**6612 BOYS' PHYSICAL EDUCATION**

**6613 GIRLS' PHYSICAL EDUCATION**

**GRADES 9, 10, 11, 12**

*1 semester—.5 credit*

**PREREQUISITE:** *None*

The students will participate in various team sports, individual sports, lifetime activities and adventure/outdoor education activities. Upon completion of four years of Physical Education at New Brighton High School, the students will have the skills and knowledge to maintain proper fitness throughout life. Assessment will be done through student participation and teacher observation.

**6614 BOYS' FITNESS TRAINING**

**6615 GIRLS' FITNESS TRAINING**

**GRADES 9, 10, 11, 12: (maximum of 22 students)**

*1 semester—.5 credit*

**PREREQUISITE:** *No medical conditions limiting participation, have not failed PE in High School and all students pre-approved by the teacher.*

The course is designed primarily to develop a base knowledge on how to design a fitness program that suits your individual needs. Students will participate in a variety of workout programs that include free weight training, running, swimming, yoga, plyo-metrics, power walking, and other health-related activities. The course is designed to strengthen the body, building self-esteem, and provide students the knowledge on how to achieve optimal health. The course will include some classroom settings to explore the skeletal and muscular systems. A detailed pre and post assessment will be conducted for the students to monitor gains achieved.

***MUSIC—Practical and Fine Arts Electives***

**6701 CHORUS**

**GRADES 9, 10, 11, 12**

*1 year—1 credit*

**PREREQUISITE:** *Permission of Instructor*

This chorus is designed to establish, develop, and strengthen the needed understandings to sing choral music of graduated difficulty. The growth of the vocal student in their vocal technique, musicianship, and music reading skills will be stressed. Any male or female may elect mixed chorus; however, you must be able to sing in tune. Evening performances are required.

**6702 HONORS CHORUS**

**GRADES 10, 11, 12**

*1 year—1 credit – 1.1 weight*

**PREREQUISITE:** *Students wishing to enroll in this course must be in grades 10-12 and will be placed in the class based on the director's evaluation and permission.*

This is an advanced choral group which studies and performs all types of music in the moderate to difficult range. Students will participate in collaborative vocal music activities through daily self-addressed harmonization in a broad choral setting. Daily choral training and development is required to successfully participate in choral competitions, i.e., Honors, District, Regional, and All State Chorus. Students will be required to perform at the annual Baccalaureate program as part of the grading procedure. Students will be required to perform at the annual Honors Program as part of the grading procedure. Students accepted into this class will be required to sing the National Anthem at least one time at a home sporting event, parade, or other school related public event. This may be done as a solo, duet, or ensemble of any size. Every student must take their own required singing assignment; for example, if two students elect to sing a duet at a basketball game, they will be required to sing at two events one for each student. Students accepted into this class will be required to attend one arts related event per semester and provide proof of their attendance, (program, ticket stub etc.) along with a completed reflection form.

**6703 INSTRUMENTAL MUSIC (BAND)**

**GRADES 9, 10, 11, 12**

*1 year—1 credit*

**PREREQUISITE:** *Permission of Instructor*

This course is for all band members with specific periods set aside for Concert and Marching Band rehearsal. After-school and summer practice sessions are required. Students may receive additional individual or ensemble instruction during their study halls. Students will learn individual and team responsibility as well as cooperation skills through peer teaching. The Band Director may opt to select students to participate in select ensembles as a result of auditions and available instrumentation. Included and required in this course is after-school participation in concert performances, football games, parades, and band festivals; practice sessions—both ensemble and individual—and occasional written work.

**6704 HONORS INSTRUMENTAL MUSIC (HONORS BAND)**

**GRADES 10, 11, and 12**

**1 year – 1 credit – 1.1 weight**

**PREREQUISITE:** *Instructor recommendation and a performance audition.*

Students enrolled in this course will have the same requirements as those students who are enrolled in instrumental music with the addition of learning more scales and arpeggios and being tested on those areas. Students enrolled in Honors Instrumental will also be required to learn the professional solo for the Pennsylvania Music Educators Association's (PMEA) District 5 Honors Band Festival. Students will be tested on the solo and may be asked to audition for the PMEA Honors Band Festival.

**6705 LIONETTES**

**GRADES 9, 10, 11, 12**

**1 semester—.5 credit**

**PREREQUISITE:** *Auditions held in the spring for the following year.*

Lionettes is part of the HS Marching Band. It is comprised of members who perform in a variety of ways, including the use of flags, batons, pom-poms, dance, and other props. The number of students chosen for the Auxiliary Unit is based on the number of Instrumentalists in the Band each year. Membership is based on auditions held in the spring for the upcoming season. Full-time members, alternates, and the use of second squad are chosen at the Band Director's discretion. Included in the requirements for Auxiliary Unit membership is after-school participation in all Marching Band functions and Rehearsals scheduled throughout the summer and school year. Any squad member who plays an instrument is **required** to participate in Concert Band.

**6706 JAZZ BAND**

**GRADES 9, 10, 11, 12**

**1 year—1 credit**

**PREREQUISITE:** *Permission of Instructor with Auditions held as needed*

This course consists of a modern jazz ensemble which stresses playing and improvisation. Music is selected from available tunes representing various styles of jazz, jazz-rock, Latin and swing music from the past and present. Jazz Band is open to any capable instrumentalist (including piano, guitar, and bass). Out-of-school performances, after school rehearsals, and homework assignments are **required**.

**6707 PERCUSSION ENSEMBLE**

**GRADES 9, 10, 11, 12**

**1 year —1 credit**

**PREREQUISITE:** *Permission from instructor. Background knowledge of reading and performing music.*

Percussion Ensemble is an instrumental ensemble that will consist of only percussion instruments. Students enrolled in this class will learn how to play different percussion instruments as well as playing together in a percussion ensemble setting. Prior experience on percussion instruments is not required. After school rehearsals may be required throughout the school year and a concert will be held at Christmas and in the spring.

**6708 MUSIC THEORY**

**GRADES 10, 11, and 12**

**1 year—1 credit**

**PREREQUISITE:** *At least one year of chorus or band in high school and instructor recommendation.*

The purpose of this course is for students who are interested in learning the theory behind reading and writing music. Students must have basic music knowledge of how to read notes and rhythms. This will be a leveled curriculum where new information will be taught based on past information. By the end of the year, students will be able to write their own short music composition(s) based on skills learned throughout the year. Homework and written assignments will be a requirement.

**6709 INTRO TO MUSIC TECHNOLOGY**

**GRADES 9, 10, 11, 12**

**1 Semester—.5 Credits**

**Prerequisite:** *Instructor permission*

This semester course is an introduction to music technology. The students will explore the creation of music, recording, editing, scoring, and the applications of modern music. Students will work independently and collaboratively to become familiar with music production and the various uses for the skills that they will develop.

## ***TECHNOLOGY EDUCATION—Practical and Fine Arts Electives***

### **6801 INTRODUCTION TO ENGINEERING**

***GRADES 9, 10, 11, 12***

***1 Semester —.5 credit***

***PREREQUISITE: None***

This course provides students with an opportunity to explore different engineering disciplines as well as introduces students to the engineering design process. The course will focus on the history of design, the steps in the engineering design process, and the importance of design to solve problems. This course will provide students with a hands-on approach to learning through the different stages of the engineering design process.

### **6802 ENGINEERING: RESEARCH & DESIGN I**

***GRADES 9, 10, 11, 12***

***1 Semester —.5 credit***

***PREREQUISITE: Introduction to Engineering, Computer Aided Design I***

This course provides students with an opportunity to research, design, and construct solutions from problems presented in different design challenges. Students will expand their knowledge gained in mathematics and science courses as well as from their own personal life experiences to solve problems. Students will conduct research, develop possible solutions, and construct solutions using the engineering design process. Each student will be required to research, design, and construct a final solution for each problem statement.

### **6803 ENGINEERING: RESEARCH & DESIGN II**

***GRADES 10, 11, 12***

***1 Semester —.5 credit***

***PREREQUISITE: Engineering Research & Design I***

This course provides students with a unique opportunity to research a particular technological system or subsystem. Students will conduct research of a real world technological problem and develop possible solutions using the engineering design process. Technological problems will be discovered through each student's individual research. Students will be required to research and design a technological problem that occurs in their life. Students will document each of the steps in the engineering design process and construct a final solution as well as a portfolio.

### **6804 APPLIED TECHNOLOGY SYSTEMS**

***GRADES 9, 10, 11, 12***

***1 Semester —.5 credit***

***PREREQUISITE: None***

This is an engineering based course that introduces the problem-solving process and utilizes the parts of the technological system (inputs, process, output, and feedback) in a project-based curriculum. Students will be engaged in many hands-on exploratory activities that include but not limited to: airplane design, catapult challenge, bridge and tower building, alternative energy (mouse trap vehicles), freefall exploration, and boat hull design. This class utilizes science and math principles and applies them to real world situations (STEM), where students will design produce, test, and evaluate every aspect of assigned projects.

### **6805 MANUFACTURING SYSTEMS I**

***GRADES 9, 10, 11, 12***

***1 Semester —.5 credit***

***PREREQUISITE: None***

This course is an entry level woodworking course that gives students an opportunity to explore basic woodworking techniques and gain valuable problem-solving skills. Students will complete individual projects using basic woodworking techniques throughout the semester. In this course students will focus on: machine and laboratory safety, measuring and design procedures, CNC machining, and basic woodworking techniques.

### **6806 MANUFACTURING SYSTEMS II**

***GRADES 9, 10, 11, 12***

***1 Semester —.5 credit***

***PREREQUISITE: Manufacturing Systems I***

This course is for students who want to further their knowledge in woodworking and carpentry. Students will explore woodworking techniques through various intermediate projects. Students will build on the basic skills and techniques learned from Manufacturing Systems I. Throughout the course students will expand their knowledge of: machine and laboratory safety, layout and design, CNC machining, and woodworking techniques.

**6807 MANUFACTURING ENTERPRISE**

**GRADES 10, 11, 12**

***1 Semester—5 credit***

***PREREQUISITE: Manufacturing Systems I & II***

This course is designed for students to explore the journey of creating a small business. Students will research, design, and market a product for their up and coming business endeavor. Students will gain valuable team building skills as well as advanced problem-solving skills during their business endeavor. In this course students will design and create a product to be mass-produced in the manufacturing setting. After the product is produced, students will have a chance to show off their marketing skills and sell the product. Students will focus on: machine and laboratory safety, layout and design, mass production, entrepreneurship, and team building skills.

**6808 PRODUCTION TECHNOLOGY I**

**GRADES 10, 11, 12**

***1 Semester—5 credit***

***PREREQUISITE: Manufacturing Enterprise***

This course provides students with an opportunity to advance their knowledge and skills in manufacturing processes. Students will design and create advanced woodworking projects with the use of skills and techniques gained from previous manufacturing courses. The use of machines, tools, and manufacturing processes will allow students to explore furniture and cabinet making. Students will focus on: machine and laboratory safety, project layout and design, and advanced cabinetry techniques.

**6809 PRODUCTION TECHNOLOGY II**

**GRADES 11, 12**

***1 Semester—5 credit***

***PREREQUISITE: Manufacturing Enterprise & Production Technology I (or permission from instructor)***

This course is a continuation of Production Technology I. It will provide students with an opportunity to advance their knowledge and skills in manufacturing processes. Students will design and create advanced woodworking projects with the use of skills and techniques gained from previous manufacturing courses. The use of machines, tools, and manufacturing processes will allow students to explore furniture and cabinet making. Students will focus on: machine and laboratory safety, project layout and design, and advanced cabinetry techniques.

**6810 HOME IMPROVEMENT TECHNOLOGIES**

**GRADES 9, 10, 11, 12**

***1 Semester—5 credit***

***PREREQUISITE: None***

This course is an entry level course that will introduce students to basics of home maintenance and repair. Students will learn and develop skills in home improvement through rough carpentry, electrical, plumbing, and drywall. This course will provide students with a hands-on approach to learning focusing on basic home improvement skills.

**6811 INTRODUCTION TO AUTO MAINTENANCE**

**GRADES 9, 10, 11, 12**

***1 Semester—5 credit***

***PREREQUISITE: None***

In this course students will focus on responsible vehicle ownership. Topics covered will include “Hands on” basic car maintenance such as checking and changing fluids, changing bulbs, changing a tire, and maintaining exterior and interior appearance. Safety systems, and legal responsibility and requirements of owning a personal vehicle in Pennsylvania will also be discussed.

**6812 COMPUTER AIDED DESIGN I**

**GRADES 9, 10, 11, 12**

***1 Semester—5 credit***

***PREREQUISITE: None***

Students interested in the Mechanical, Technical, and Engineering fields will gain skills and knowledge which will help them achieve success in these careers. Computer aided design is an excellent general study course for all students, but is especially important for future post high school engineering/technical students. It is also beneficial to those who are planning a career in a skilled trade. This course will include basic mechanical drawing, pictorial representation and CAD (Computer Aided Design.)

**6813 COMPUTER AIDED DESIGN II**

**GRADES 9, 10, 11, 12**

**1 Semester—.5 credit**

**PREREQUISITE: Computer Aided Design I**

This course is designed for students with an above average interest in the field of Engineering and Mechanical/Technical Design. This course will involve many of the more advanced aspects of technical drawing including but not limited to: advanced 3 and 4 view technical drawings in both orthographic and isometric projections, pictorial representation, section views, and an extensive use of descriptive geometry. All drawings will be completed using Autocad Computer Aided Design software.

**6814 COMPUTER AIDED DESIGN III**

**GRADES 10, 11, 12**

**1 Semester—.5 credit**

**PREREQUISITE: Computer Aided Design I & II**

This course is designed for students who wish to further their Cad skills and knowledge. This course will introduce students to various types of buildings and the components used to build them. Students will learn how buildings are designed and constructed. Projects consist of Computer Aided design drawings. Other topics include architectural styles, residential area planning, architectural plans, building materials, site plans, and zoning ordinances.

**6815 VIDEO PRODUCTION I**

**GRADES 9, 10, 11, 12**

**1 Semester — .5 credit**

**PREREQUISITE: None**

This course is intended to teach basic video production techniques such as writing, shooting and editing short video programs. The student will demonstrate knowledge of camera techniques and display proficiency in iMovie, the video editing software used in editing movies.

**6816 VIDEO PRODUCTION II**

**GRADES 9, 10, 11, 12**

**1 Semester — .5 credit**

**PREREQUISITE: Video Production I**

This course is intended to build upon already learned knowledge from Video Production I. The students will engage in more in-depth, creative assignments and explore audio editing techniques. The students will also create segments/media to be utilized with our high school media center.

**6817 NBHS TV**

**GRADES 9, 10, 11, 12**

**1 Year — 1 credit**

**PREREQUISITE: None**

This course is intended to provide students with the opportunity to be involved in completion of the daily morning announcements. Students will assist in producing the announcements and may become a news anchor in charge of providing essential news or information to the students and faculty of NBHS.

## ***FAMILY AND CONSUMER SCIENCES-Practical and Fine Arts Electives***

### **6901 FOODS AND NUTRITION I**

***GRADES 10, 11, 12***

***1 semester — .5 credit***

***PREREQUISITE: None***

Foods 1 is a course designed to explore the basic food groups while teaching safety and sanitation skills needed in food preparation. Communication, organization, and conservation skills are incorporated in the weekly foods labs while students learn about food terminology, kitchen equipment and applied culinary math. Students will demonstrate basic food preparation techniques in the kitchen including knife safety, cooking methods and the ability to read a recipe. This course utilizes cooperative learning, lab experiences and individual assessments to monitor students' progress.

### **6902 FOODS AND NUTRITION II**

***GRADES 10, 11, 12***

***1 Semester— .5 credit***

***PREREQUISITE: Foods & Nutrition I***

Foods 2 will continue to build upon the knowledge and skills attained in Foods 1. This semester course is designed to strengthen the understanding and importance of nutrition as it relates to wellness. Using the new MyPlate guidelines, students will investigate the essential nutrients found in each of the five basic food groups. Students will develop their understanding of the principals of nutrition by planning, creating and evaluating foods made in weekly foods labs. This course utilizes cooperative learning, lab experiences and individual assessments to monitor students' progress.

### **6903 CULINARY CUISINES**

***GRADES 11, 12***

***1 Semester—.5 credit***

***PREREQUISITE: Foods & Nutrition I, Foods & Nutrition II***

Culinary Cuisines is designed to utilize the skills developed from Foods I and II. Students are expected to function at an independent level in the kitchen. This upper level foods class is a one semester course that will acquaint students with food customs of various countries and regions of the world. Through this course students will experience the role of food in a variety of cultures and learn how the surrounding environment influences the tastes and flavors of a region. This course utilizes cooperative learning, lab experiences and individual assessments to monitor students' progress.

### **6904 CHILD DEVELOPMENT I**

***GRADES 11, 12 (Seating is limited due to the nature of this course)***

***1 Semester — .5 credit***

***PREREQUISITE: Permission of instructor***

This course is designed to explore child development concepts and theories through an interactive elementary field work experience. Students will learn about positive guidance skills and effective teacher traits along with the areas of child development. Concepts learned in class will be observed and applied in an elementary classroom setting three times a week. Students will also study the positive traits of a child caregiver along with the responsibilities the position entails.

### **6905 CHILD DEVELOPMENT II**

***GRADES 11, 12 (Seating is limited due to the nature of this course)***

***1 semester — .5 credit***

***PREREQUISITE: Child Development I***

This course builds upon the concepts presented in Child Development 1. Students must be prepared to work with children on an individual and daily basis to provide age appropriate activities and social skills. This course will emphasize critical thinking and problem solving, communication and collaboration, and the ability to be a part of a successful learning team. Students will model their learning by writing and creating age appropriate lesson plans and activities to teach in an elementary classroom. Elementary classroom visits will be up to three times per week. Seniors who choose this course need to have an interest in children and strive to understand their needs.

## ***ART—Practical and Fine Arts Electives***

The following courses are designed to challenge and encourage any student who wishes to express feelings and emotions through the visual arts. Students will be encouraged to visualize, appreciate, analyze, and create using a variety of media and tools enabling them to become creative producers, effective visual communicators, and life-long contributors. All student work will be exhibited throughout the year in the ARTSCAPE Gallery. Each student will maintain a portfolio of the year's work for assessment.

### **6910 FOUNDATION ART I**

***GRADES 9, 10, 11, 12***

***1 Semester—.5 credit***

***PREREQUISITE: None***

This course is an entry-level course intended to develop skills that will enable a student to improve techniques, cultivate an appreciation of art, and pursue further art courses. Throughout this course, students will be introduced to the Elements of Art and the fundamentals of the art making process. Students will create a variety of two-dimensional artworks using different materials and techniques. Students will explore different ideas of the creative process including planning, designing, and production.

### **6911 FOUNDATION ART II**

***GRADES 9, 10, 11, 12***

***1 Semester—.5 credit***

***PREREQUISITE: Completion of Foundation Art I***

This course will build upon the fundamental techniques learned in Foundation of Art I and will introduce the Principles of Art to students. Students will continue to expand their knowledge and understanding of different techniques and materials in this course. This course is designed to enrich student learning through more in-depth concepts and ideas while introducing students to even more materials and techniques.

### **6912 ADVANCED DRAWING**

***GRADES 10, 11, 12***

***1 Semester—.5 credit***

***PREREQUISITE: Completion of Foundation Art I & II***

Building upon what students have learned in Foundation Art I and II, this class will introduce students to advanced drawing techniques. Along with the advanced drawing techniques, students will learn by using a variety of media including graphite, charcoal, pastel, and colored pencils. Students will be exposed to a variety of techniques including still life, portraiture, perspective, and observational drawing. Students will be required to develop an artist portfolio throughout this course.

### **6913 ADVANCED PAINTING**

***GRADES 10, 11, 12***

***1 Semester—.5 credit***

***PREREQUISITE: Completion of Foundation Art I & II and Advanced Drawing***

In conjunction with Advanced Drawing, this course will continue to elaborate on the elements and principles of Art and how they apply to different techniques in painting. Students will be introduced to advanced painting methods and continue to build upon what they have learned in previous art courses in order to refine their artistic approach. Students will be encouraged to begin to develop their own personal styles as well as learning through visual demonstrations. Students will also be required to build upon their artist portfolio from Advanced Drawing.

### **6914 INTRODUCTION TO CERAMICS**

***GRADES 9, 10, 11, 12***

***1 Semester—.5 credit***

***PREREQUISITE: None***

This course is an entry-level course designed to introduce students to the basic fundamentals of ceramics. Ceramics offers students a very hands-on approach to the art making process allowing students to develop their craftsmanship and critical thinking skills. Within this course, students will learn necessary techniques to pursue further ceramic courses. Basic techniques of hand building such as coil building, slab building, and sculptural construction will be covered to give students a wide range of sculptural methods.

**6915 CERAMICS II****GRADES 9, 10, 11, 12****1 Semester—.5 credit****PREREQUISITE:** *Completion of Introduction to Ceramics*

Building upon techniques learned in Introduction to Ceramics, students will continue to perfect and enhance skills first introduced in the previous course. In addition, students will develop a personal style and sculptural techniques through a variety of three-dimensional assignments. Students will spend extensive time on the potter's wheel perfecting their skill as well as traditional hand-building techniques.

**6916 CERAMICS III****GRADES 10, 11, 12****1 Semester—.5 credit****PREREQUISITE:** *Introduction to Ceramics & Ceramics II*

This course is designed to give students an advanced and in-depth experience in ceramics. Coursework will be centered on the pottery wheel in conjunction with additional hand-building coursework. Students will be introduced to advanced pottery techniques in both construction and glazing. Assignments explored will be both functional and artistic in nature while addressing complex ceramic practices.

**6917 HONORS ART****GRADES 11, 12****1 year —1 credit—1.1 weight****PREREQUISITE:** *Completion of Foundation Art I & II and 1 full additional art credit. Teacher approval*

This course is a culminating experience of ideas and skills learned throughout a student's high school artistic career. Honors art is designed to further develop students' skills and knowledge while allowing students to develop their own creativity and artistic approaches. This course also allows students to develop a higher level of creative thought while making personal artistic judgments. Students will be required to keep a journal and artistic portfolio throughout the course.

**GENERAL ELECTIVES/SPECIALIZED PROGRAMS****7000 CAREER SKILLS****GRADES 9, 10, 11, 12****1 year—1 credit****PREREQUISITE:** *None*

This course is designed to assist students in developing a career plan and learning what it takes to find and keep a job. Students will explore their interests and abilities for specific careers and become familiar with workplace skills by utilizing books, career websites, small group activities and direct instruction.

**7001 SAT PREP****GRADES 11, 12****1 SEMESTER—.5 credit****PREREQUISITE:** *None*

The objective of this course is to prepare students for the mathematics, Evidence Based Reading and writing sections of the SAT exam. This one semester, .5 credit, general elective course will supply an overview of the structure for all three components of the SAT exam. In addition, students will review mathematics, Evidenced Based Reading and writing skills and test-taking strategies. Upon successful completion of this course, students will be better prepared to take the SAT exam.

**7002 PERFORMANCE FORENSICS—English Elective****GRADES 9, 10, 11, 12****1 year—1 credit****PREREQUISITE:** *None*

Performance Forensics is a public speaking course based on the Mock trial statewide competition sponsored by the Pennsylvania and Beaver County Bar Associations. This course can be taken as an elective for one (1) credit or the student may choose to participate as an activity. It will utilize materials from the PA Bar Association and other material related to any public speaking venues chosen for participation during the school year. The class instruction will be given after regular school hours and in the evening during the second and third nine-week periods. Professional lawyers and other experienced instructors will assist in the instruction. District attendance policies will be applied wherever applicable. A minimum of 70 classroom hours, including performance time, will be required to earn credit for this class.

**7003 HONORS PERFORMANCE FORENSICS –English Elective**

**GRADES 10, 11, 12**

***1 year—1 credit—1.1 weight***

***PREREQUISITE: Performance Forensics***

Honors Performance Forensics may be taken by any student who has completed Performance Forensics. It will count as one full credit and participation and instruction will be given concurrently with the Performance Forensics class. Each student will maintain a portfolio of the work prepared for and used in the Prosecution/Plaintiff and Defense cases created. Additionally, each honors student shall have some leadership responsibility in mentoring students new to the Mock Trial format and constituent elements as well as input into presentation styles and strategies.

**7004 Allied Health Career Exploration**

**GRADES 11 & 12**

***1 Semester— .5 credit***

***PREREQUISITE: Completion of Biology and Chemistry***

The goal of this course is to help students explore the various health care careers that are available today. Students will research numerous allied health careers through use of internet resources, one on one interview sessions with professionals, information from guest speakers and possible job shadowing experiences. Students will also develop an individual career plan based on their research that includes several possible schools/universities and desired places of future employment.

**7010 GRADUATION PROJECT**

***REQUIRED FOR ALL SENIORS- Independent Study***

***1 Credit***

Senior Project is a one-credit independent study required by the New Brighton Area School District that all seniors must pass in order to graduate. Students will job shadow in a career of their choice, complete 25 hours of community service, and complete a typed portfolio. Students will also be required to complete a final interview in order to pass the project. All deadlines must be adhered to and failure to complete the project satisfactorily will affect a student's ability to graduate. See the Senior Project Guideline booklet or stop in the Guidance Department for more information.

**7011 WORK RELEASE**

**GRADE 12**

***1 year—No credit given***

***PREREQUISITE— Student must have a job by the start of their senior year and have at least 20 credits.***

Work release is an option for seniors who are on-track with graduation requirements. At the end of their junior year, students who require less than a full course load of credits their senior year are eligible. A student's schedule will be reviewed by the guidance counselor in order to accommodate leaving for work release after their last required class. This option could involve leaving as early as 5<sup>th</sup> period or leaving for only the last period of the day. There are no guarantees that the courses a student requests will accommodate an early dismissal.

**7020 DUAL ENROLLMENT**

**GRADES 11 & 12**

***1 year—1 credit each course***

***PREREQUISITE—80% average***

Dual enrollment allows students to take college courses simultaneously while taking high school courses. Students who participate in the Dual Enrollment program attain one high school credit and 3 to 4 college credits. Students with 80%+ average are eligible to attend Penn State Beaver Campus or Community College of Beaver County. Senior students' schedules may be adjusted to accommodate leaving the high school to take Dual Enrollment classes. The cost of the college courses must be paid for by the student's family. These courses are not remedial courses. Course selections must be approved by college admissions staff and the student's high school guidance counselor. Students must express interest to participate with their guidance counselor. \*\*\*College courses taken outside of the Dual Enrollment program must be approved by the principal in order to receive credit towards graduation requirements. Dual Enrollment courses **are not** given a weighted grade.

**7021 CCBC AVIATION ACADEMY- Can begin in Grade 10**

**7022 CCBC HEALTH ACADEMY- Can begin in Grade 11**

**7023 CCBC STEM ACADEMY- Can begin in Grade 11**

*1 year—1 credit each course*

**PREREQUISITE**—*CCBC Academy application and acceptance into program*

The Community College of Beaver County (CCBC) provides an opportunity for students who are interested in a career in Aviation, Health Care or a STEM related field through their Academies. These Academies allow students to begin college coursework in their chosen field during high school in an effort to jumpstart their career. Students participate in high school courses here at NBHS for a half day and also attend college level courses on CCBC's campus for a half day. Students/families are responsible for any costs associated with these programs as well as transportation. Scholarship/financial assistance MAY be available to cover program tuition and fees.

**5100 LIONS ON LINE ACADEMY (LOLA)**

**GRADES 9, 10, 11, 12**

*1 year—1 credit each course*

**PREREQUISITE:** *Administrative approval only.*

Enrollment in this program is through an agreement between the school district and the student's family. Using online curricula, students will be assigned courses for credit recovery, current coursework or credit acceleration. Consideration for this program will be on an individual basis, with personalized scheduling according to academic needs, course availability, and administrative approval. Students will be required to meet designated completion deadlines as assigned by the Teacher of Record. Students are responsible for following guidelines presented in both *The NBHS Student Handbook* and the *LOLA Student Handbook*.

**3010 ENGLISH AS A SECOND LANGUAGE**

**GRADES 9, 10, 11, 12**

*1 year—1 credit (Will replace English)*

**PREREQUISITE:** *Administrative Assignment*

This is a tutorial course designed to teach Level I English through Level 5 bridging levels of English to non-native English speakers.

- Students whose entering knowledge of English ranges from Level I through Level 5 based on English language proficiency or placement tests.
- Students with a wide range of aptitudes and learning styles
- Children and adults
- Classroom and independent study

The content of ESL includes language skills of speaking, listening, reading and writing. Instructional methods will include small group, one-on-one, and computer-assisted learning programs. The course work is designed to provide grade level English and Literature instruction with appropriate modifications, as well as to provide support for English required in other content area classrooms. This year-long course will replace the English course for the academic year and satisfies the English requirement for graduation.

## ***BEAVER COUNTY CAREER AND TECHNOLOGY CENTER***

**3501 HVAC-R (Air Conditioning/Refrigeration)**

**3502 COLLISION REPAIR TECHNOLOGY**

**3503 AUTO MECHANICS**

**3504 BUSINESS INFORMATION SYSTEMS**

**3505 CARPENTRY**

**3506 COMMERCIAL ART**

**3507 LOGISTICS AND MATERIALS MANAGEMENT**

**3508 COSMETOLOGY**

**3509 ELECTRICAL OCCUPATIONS**

**3510 CULINARY**

**3511 GRAPHIC ARTS/PRINTING**

**3512 GREENHOUSE/LANDSCAPING**

**3513 HEALTH OCCUPATIONS**

**3514 MACHINE TOOL TECHNOLOGY**

**3515 MASONRY/BRICKLAYING**

**3516 WELDING**

**3517 VET TECH**

## ALL BCCTC PROGRAMS

**GRADES (10 ), 11, 12**

**1 year—3 credits—1/2 day—PM ONLY**

**PREREQUISITE:** *Must complete a New Brighton application AND a BCCTC application and be selected by NBHS staff.*

The Beaver County Career and Technology Center is an extension of your high school which offers Career/Technology Courses. Each occupational program prepares students to enter the job market with a career skill. The Career/Technology Courses are two-year programs for students in grades 11 and 12, which meet three hours per day for a total of 1080 hours, except for the cosmetology program which is a 3 year program beginning in 10th grade.

Students who wish to apply for admission may request an application from the Guidance Office. This application is to be completed by the student and parent and returned to the Guidance Office. Student selection is decided by the home school and is based upon factors such as interest, aptitude, counselor recommendations, teacher recommendations, attendance, school achievement, discipline, and quota.

Students must successfully complete 2 or 3 years of BCCTC in order to waive academic credits towards graduation. The following scheduling chart explains the credit requirements for graduation. See below for details.

### Beaver County Career and Technology Center Scheduling Options

<p style="text-align: center;"><b>BCCTC STUDENTS</b> (Two year program)</p> <p><b>NEEDS:</b> 4 CREDITS OF ENGLISH 1 CREDIT OF GYM .5 CREDIT OF HEALTH 1 CREDIT OF COMPUTERS 1 CREDIT OF FINE ART</p> <p><b>OPTIONS:</b>    4 History—3 Science—3 Math                   3 History—4 Science—3 Math                   3 History—3 Science—4 Math</p>
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<p style="text-align: center;"><b>BCCTC STUDENTS</b> (Three year program/Cosmetology Students)</p> <p><b>NEEDS:</b> 4 CREDITS OF ENGLISH 3 CREDITS OF MATH 3 CREDITS OF HISTORY 3 CREDITS OF SCIENCE 1 CREDIT OF GYM .5 CREDIT OF HEALTH *1 CREDIT OF COMPUTER/BUSINESS <b>OR</b> *1 CREDIT OF FINE ART</p>
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*\*Students need only complete either a Computer/Business or Fine Art course, depending on which program they choose to complete.*

**The following programs will meet the Computer/Business requirement for graduation:**

Business Information Systems	Commercial Arts
Graphic Arts	Logistics & Material Management

**The following programs will meet the technology requirement for graduation:**

HVAC-R (Air Conditioning/Refrigeration)	Health Occupations
Collision Repair Technology	Machine Tool Technology
Auto Mechanics	Masonry/Bricklaying
Carpentry	Culinary
Cosmetology	Welding
Electrical Occupations	Vet Tech
Greenhouse/Landscaping	

\*Students who will only complete 1 year of BCCTC will be assessed on an individual basis for credit requirements.

\*Students who are delinquent on credits for graduation will be assessed on an individual basis for approval to attend BCCTC.

\*Completion of 27 credits are required for all students (including students who attend the BCCTC) in order to graduate.

## ***AFTER-SCHOOL CLUBS***

***Ecology Club-*** The Ecology Club is an opportunity for students to discuss ways to be environmentally responsible locally. Students also have a chance to participate in the Beaver County Conservation District sponsored Envirothon competition in the spring.

***Fitness Club-*** This club meets in the workout room on designated days to work-out together and show support to each other in living a healthy lifestyle.

***Gay Straight Alliance-*** The GSA at NBHS will work to create an LGBTQ+ safe space, promote an accepting environment, and work to increase self-esteem in group members. This group will work to remove stereotypes and reduce feelings of isolation. The group will support all orientations and educate our school environment, staff and community in order to accept and support diversity.

***Interact Club-*** Interact Club is a service-based club in which members volunteer their time to help and serve others through various projects at school and in the community. Members are to have a minimum of 5 volunteer hours per year.

***Lioness-*** Lioness Club is an after-school club that organizes the winter dance and volunteers at the Special Olympics in the spring.

***National Honor Society-*** NHS recognizes outstanding student achievement in the areas of scholarship, leadership, service, and character.

***SADD/SHIELD Club-*** This club organizes and advertises events and ideas about making smart decisions in regard to drugs and alcohol. This club also works closely with the New Brighton Police Department on these events to help promote a safe environment for all students and staff.

***Student Council-*** Voted in by their peers and by the recommendation of their teachers, Student Council members are positive and hard-working students who represent their classmates. They share ideas with administration and with other students, often communicating information between their classmates and staff. NBHS Student Council plans, organizes and works many key events: blood drives, Open House, Highway Clean-up, and the Haunted Tunnel.

***Ushers Club-*** Usher's Club provides student helpers at school-related events to help with showing parents, students, visitors to the event location, handing out programs for events being held.

***Off the Streets-*** This club meets on various Saturday evenings in the gymnasium to maintain an active lifestyle. The objective is for students to get involved physically, maintain a healthy lifestyle, and learn to make decisions that will have a positive impact on themselves and others.

## **NON-DISCRIMINATION POLICY**

New Brighton Area School District is an equal opportunity education institution and will not discriminate on the basis of race, color, national origin, sex, handicap, or limited English proficiency in its activities, programs or employment practices as required by Title VI, Title IX and section 504.

## **CONFIDENTIALITY OF STUDENT RECORDS**

The New Brighton Area School District has written policies which address the right of privacy and confidentiality of student records including those of exceptional students. These policies describe procedures for the collection, care, and sharing of student records.

Your child's record may contain various kinds of information such as results of informal testing, attendance, test scores, school achievement, and descriptive information about your child such as height, weight, birth date, and address. The record may also include parent consent forms, reports of all formal assessments such as psychological reports, results of multi-disciplinary team meetings, copies of Individual Education Programs (IEPs), Notice of Recommended Educational Placement (NOREPs), and requests for release of information for file review.

Parents must give written permission to share items in the record with outside agencies. Written parental consent for release of exceptional pupil records is not necessary if a request is made by authorized representatives of the Comptroller General of the United States, Commissions of Education, or the Director of the National Institute of Education; state or local officials as required by state laws or when the health, safety, or welfare of the child is in danger; and/or educational agencies who are providing or will be providing educational services for the child.

The information in your child's school records is available to you. You may see your child's record and receive a copy by making a request in writing to the High School Principal. Any information in your child's record can be challenged through written communication to the Superintendent of Schools.

Students and parents can request an academic transcript by contacting the guidance secretary. An Academic Release of Information form must be completed by parents in order for New Brighton High School to release your child's transcript to any academic institution.

## **PARTICIPATION OF EXCEPTIONAL STUDENTS**

No exceptional students shall be denied because of handicap, participation in co-curricular, intramural or interscholastic activities or any of the services offered or recognitions rendered regularly to the students of the New Brighton Area School District unless such participation is not practical because of the handicap.